## AMENDMENTS TO THE SPECIFICATION

Kindly amend the specification as follows:

1. Please replace the paragraph on page 11, line 23, to page 12, line 20, of the application as originally filed, wherein said paragraph begins with "In the manufacturing...," with the following new paragraph:

In the manufacturing method of the supercharger rotor of the present invention, before the cavity formation step\_(A), a rotor shaft processing step may be provided to process a left and right helical cross portion on a surface of the rotor shaft in a range shorter than a body length of a profile portion 11a. This left and right helical cross portion includes a right handed screw helical groove and a left handed screw helical groove cut by, for example a lathe. The cross portion is formed by crossing these with each other. The screw by cutting is a 10-thread screw having a pitch of, e.g., 1mm, and has a normal angle shape. In lathe work, a plurality of cutting tools are used in parallel, and multiple thread screws are simultaneously processed or processed by shifting cutter positions by a plurality of times. Other than cutting by using the lathe, for example knurling may be carried out. By providing the rotor shaft processing step of forming the left and right cross portion on the surface of the rotor shaft in the range shorter than the body length of the profile portion 11a, when the rotor shaft is cast-coated in die-casting, aluminum is surely-injected by a casting pressure into the cross groove portion formed on the surface of the rotor shaft, and a sufficient fastening force is provided by mechanical connection.